

Application No.: 09/724,953  
Amendment Under 37 CFR §1.312 dated May 27, 2004  
Reply to Notice of Allowance March 11, 2004

**Listing of Claims:**

1-10. (Canceled)

11. (Previously Presented) A method of treating Alzheimer's disease in a mammalian subject, comprising administering to the subject a dosage of: (a) an immunogenic A $\beta$  fragment effective to produce an immune response comprising antibodies against A $\beta$ ; and, (b) an adjuvant that augments the immune response to A $\beta$ , thereby treating Alzheimer's disease.

12-13. (Canceled)

14. (Previously Presented) The method of claim 11, wherein said A $\beta$  fragment induces an immune response directed against a neoepitope formed by amyloid deposits with respect to amyloid precursor protein (APP).

15-20. (Canceled)

21. (Previously Presented) The method of claim 11, wherein said adjuvant is selected from the group consisting of STIMULON QS-21, 3-De-O-acylated-monophosphoryl lipid A, and alum.

22. (Previously Presented) The method of claim 11, wherein said immune response is characterized by a serum titer of the antibodies of at least 1:1000 with respect to A $\beta$ .

23. (Previously Presented) The method of claim 22, wherein said serum titer of the antibodies is at least 1:5000 with respect to A $\beta$ .

24. (Previously Presented) The method of claim 11, wherein said immune response is characterized by a serum titer of the antibodies A $\beta$  corresponding to greater than about four times higher than a serum titer of anti-A $\beta$  antibodies measured in a pre-treatment control serum sample.

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25. (Previously Presented) The method of claim 24, wherein said serum titer of the antibodies is measured at a serum dilution of about 1:100.

26-58. (Canceled)

59. (Previously Presented) A method of prophylaxis of Alzheimer's disease in a mammalian subject, comprising administering to the subject a dosage of: (a) an immunogenic A $\beta$  fragment effective to produce an immune response comprising antibodies against A $\beta$  and, (b) an adjuvant that augments the immune response to the A $\beta$ , thereby effecting prophylaxis of Alzheimer's disease.

60. (Previously Presented) The method of claim 59, wherein said A $\beta$  fragment induces an immune response directed against a neoepitope formed by amyloid deposits with respect to amyloid precursor protein (APP).

61-63. (Canceled)

64. (Previously Presented) The method of claim 59, wherein said adjuvant is selected from the group consisting of STIMULON QS-21, 3 De-O-acylated-monophosphoryl lipid A, and alum.

65. (Previously Presented) The method of claim 59, wherein said immune response is characterized by a serum titer of the anti-A $\beta$  antibodies of at least 1:1000 with respect to A $\beta$ .

66. (Previously Presented) The method of claim 65, wherein said serum titer of the antibodies is at least 1:5000 with respect to A $\beta$ .

67. (Previously Presented) The method of claim 59, wherein said immune response is characterized by a serum titer of the anti-A $\beta$  antibodies corresponding to greater than about four times higher than a serum titer of anti-A $\beta$  antibodies measured in a pre-treatment control serum sample.

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68. (Previously Presented) The method of claim 59, wherein said serum titer of the antibodies is measured at a serum dilution of about 1:100.

69. (Canceled)

70. (Previously Presented) The method of claim 11, wherein the subject has a known genetic risk of Alzheimer's disease.

71. (Previously Presented) The method of claim 59, wherein the subject has a known genetic risk of Alzheimer's disease.

72. (Previously Presented) The method of claim 11, wherein said A $\beta$  fragment is A $\beta$ 1-3.

73. (Previously Presented) The method of claim 11, wherein said A $\beta$  fragment is A $\beta$ 1-4.

74. (Previously Presented) The method of claim 11, wherein said A $\beta$  fragment is A $\beta$ 1-5.

75. (Previously Presented) The method of claim 11, wherein said A $\beta$  fragment is A $\beta$ 1-6.

76. (Previously Presented) The method of claim 11, wherein said A $\beta$  fragment is A $\beta$ 1-7.

77. (Canceled)

78. (Previously Presented) The method of claim 11, wherein said A $\beta$  fragment is A $\beta$ 1-10.

79. (Previously Presented) The method of claim 11, wherein said A $\beta$  fragment is A $\beta$ 1-12.

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80. (Previously Presented) The method of claim 11, wherein said A $\beta$  fragment is A $\beta$ 13-28.

81. (Previously Presented) The method of claim 11, wherein said A $\beta$  fragment is A $\beta$ 25-35.

82. (Previously Presented) The method of claim 11, wherein said A $\beta$  fragment is A $\beta$ 33-42.

83. (Previously Presented) The method of claim 11, wherein said A $\beta$  fragment is linked to a carrier molecule to form a conjugate.

84. (Previously Presented) The method of claim 72, wherein said A $\beta$  fragment is linked to a carrier molecule to form a conjugate.

85. (Previously Presented) The method of claim 73, wherein said A $\beta$  fragment is linked to a carrier molecule to form a conjugate.

86. (Previously Presented) The method of claim 74, wherein said A $\beta$  fragment is linked to a carrier molecule to form a conjugate.

87. (Previously Presented) The method of claim 75, wherein said A $\beta$  fragment is linked to a carrier molecule to form a conjugate.

88. (Previously Presented) The method of claim 76, wherein said A $\beta$  fragment is linked to a carrier molecule to form a conjugate.

89. (Canceled)

90. (Previously Presented) The method of claim 78, wherein said A $\beta$  fragment is linked to a carrier molecule to form a conjugate.

91. (Previously Presented) The method of claim 79, wherein said A $\beta$  fragment is linked to a carrier molecule to form a conjugate.

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92. (Previously Presented) The method of claim 80, wherein said A $\beta$  fragment is linked to a carrier molecule to form a conjugate.

93. (Previously Presented) The method of claim 81, wherein said A $\beta$  fragment is linked to a carrier molecule to form a conjugate.

94. (Previously Presented) The method of claim 82, wherein said A $\beta$  fragment is linked to a carrier molecule to form a conjugate.

95. (Previously Presented) The method of claim 59, wherein said A $\beta$  fragment is A $\beta$ 1-3.

96. (Previously Presented) The method of claim 59, wherein said A $\beta$  fragment is A $\beta$ 1-4.

97. (Previously Presented) The method of claim 59, wherein said A $\beta$  fragment is A $\beta$ 1-5.

98. (Previously Presented) The method of claim 59, wherein said A $\beta$  fragment is A $\beta$ 1-6.

99. (Previously Presented) The method of claim 59, wherein said A $\beta$  fragment is A $\beta$ 1-7.

100. (Canceled)

101. (Previously Presented) The method of claim 59, wherein said A $\beta$  fragment is A $\beta$ 1-10.

102. (Previously Presented) The method of claim 59, wherein said A $\beta$  fragment is A $\beta$ 1-12.

103. (Previously Presented) The method of claim 59, wherein said A $\beta$  fragment is A $\beta$ 13-28.

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104. (Previously Presented) The method of claim 59, wherein said A $\beta$  fragment is A $\beta$ 25-35.

105. (Previously Presented) The method of claim 59, wherein said A $\beta$  fragment is A $\beta$ 33-42.

106. (Previously Presented) The method of claim 59, wherein said A $\beta$  fragment is linked to a carrier molecule to form a conjugate.

107. (Previously Presented) The method of claim 95, wherein said A $\beta$  fragment is linked to a carrier molecule to form a conjugate.

108. (Previously Presented) The method of claim 96, wherein said A $\beta$  fragment is linked to a carrier molecule to form a conjugate.

109. (Previously Presented) The method of claim 97, wherein said A $\beta$  fragment is linked to a carrier molecule to form a conjugate.

110. (Previously Presented) The method of claim 98, wherein said A $\beta$  fragment is linked to a carrier molecule to form a conjugate.

111. (Previously Presented) The method of claim 99, wherein said A $\beta$  fragment is linked to a carrier molecule to form a conjugate.

112. (Canceled)

113. (Previously Presented) The method of claim 101, wherein said A $\beta$  fragment is linked to a carrier molecule to form a conjugate.

114. (Previously Presented) The method of claim 102, wherein said A $\beta$  fragment is linked to a carrier molecule to form a conjugate.

115. (Previously Presented) The method of claim 103, wherein said A $\beta$  fragment is linked to a carrier molecule to form a conjugate.

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116. (Previously Presented) The method of claim 104, wherein said A $\beta$  fragment is linked to a carrier molecule to form a conjugate.

117. (Previously Presented) The method of claim 105, wherein said A $\beta$  fragment is linked to a carrier molecule to form a conjugate.